

ABSTRACT

A hydrodynamic thrust bearing, particularly forming a part of a bearing system for a rotary bearing of spindle motors utilized to power hard disk drives. The thrust bearing includes at least one annular thrust plate and a counter bearing corresponding to the thrust plate. The thrust plate is fixedly mounted on a shaft rotatably supported by means of a radial bearing system. The thrust plate is arranged on the shaft which is provided with an axial bore in the area where the thrust plate is to be positioned. A spherical element fixing the thrust plate is pressed into the axial bore. An outer diameter of the fixing element is greater than the inner diameter of the axial bore. This type of press connection between the thrust plate and the shaft allows comparatively thinner thrust plates to be used while the performance of the thrust bearing remains the same or improves.